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EXAMINER	
CHIN, BRAD Y	
ART UNIT	**PAPER NUMBER**
1744	

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/687,847	TREIMAN, MICHAEL T.	
	Examiner	Art Unit	
	Brad Y. Chin	1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 April 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-39* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *26* is/are allowed.

6)☒ Claim(s) *1-25 and 27-39* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1, 7-8, and 36 rejected under 35 U.S.C. 102(e) as being anticipated by Sand et. al. [U.S. Patent No. 6,655,401].

Regarding claim 1, Sand et. al. teach a method for diluting a concentrated solution of sterilant for sterilizing instruments or equipment comprising the steps of: providing an eductor (single device 32 for selectively educting one or more chemical fluids for mixing with a motive fluid or eductor 92), the eductor comprising a metering tip (See col. 5, lines 1-7 – metering tip (not shown) for controlling the dilution ratio of the chemical fluid) having a first orifice size (See col. 5, lines 1-7 – metering tip comprises an orifice allowing the chemical fluid to flow from the chemical fluid reservoir to the chemical inlet port), a chemical inlet port (chemical port 94), and a water inlet port (See Fig. 2 – water inlet port on the top of single device 32 at end of motive fluid conduit 36); hooking a container containing concentrated sterilant to the chemical inlet port of the eductor (See col. 5, lines 4-7 – reservoir containing the chemical fluid (not shown) connected to the chemical inlet port of the eductor by use of a chemical fluid conduit); hooking a water supply source to the water inlet port of the eductor (See col. 2, line 6 – pressurized water supply at water inlet 16), the water supply source comprising a regulating valve for regulating a working pressure of the water supply (See col. 2, line 6 – the motive fluid is a pressurized water supply at water inlet 16; See col. 4, lines 23-27 – the motive fluid is received at an inlet valve 34,

depicted as a ball valve, and passed through a motive fluid conduit 36 to the device 32 for mixing a selected chemical fluid, drawn respectively from chemical fluid reservoirs 38, 40 via chemical conduits 42, 44. The inlet valve 34, i.e. the ball valve, rotates as inlet valve 34 is rotated between an "open" and "closed" position, functioning to regulate the working pressure of the water supply entering the water inlet port of the eductor); activating the eductor to mix water and concentrated sterilant to a desired admixture containing a volume of sterilant to a volume of water (single selection control 52 for selecting [activating] the mixing and for simplifying use of the dispenser for the user); adjusting the admixture by varying the volume of the sterilant to the volume of water by varying at least one of the metering tip to one having a second orifice size and the working pressure of the water supply to the eductor (See col. 5, lines 1-7 – typically a metering tip (not shown) is inserted into the chemical port 94 for controlling the dilution ratio of the chemical fluid in coordination with the dimensional sizing of the eductor; See col. 2, line 6 – the motive fluid is a pressurized water supply at water inlet 16; See col. 4, lines 23-27 – the motive fluid is received at an inlet valve 34, depicted as a ball valve, and passed through a motive fluid conduit 36 to the device 32 for mixing a selected chemical fluid, drawn respectively from chemical fluid reservoirs 38, 40 via chemical conduits 42, 44. The inlet valve 34, i.e. the ball valve, rotates as inlet valve 34 is rotated between an "open" and "closed" position, functioning to regulate the working pressure of the water supply entering the water inlet port of the eductor); and using the admixture to sterilize an instrument for use in treating a subject (See col. 4, lines 15-22 – a suitable application for dispenser 30 includes dispensing chemical fluids such as a disinfectant, e.g. to sterilize an instrument for use in treating a subject; See col. 6, lines 54-56 – the selected fluids are then dispensed through outlet 48 for uses, such as washing or filling portable dispensing articles, such as spray bottles).

Regarding claim 7, Sand et. al. teach the method, further comprising the steps of providing a second eductor (second eductor 96) and hooking a container containing at least one of a disinfectant (See col. 4, lines 15-22 – one suitable application identifies dispensing chemical fluids such as disinfectants), a sporicide, a biocide, a virucide, or a fungicide to a chemical inlet port (chemical port 98) of the second eductor (second eductor 96).

Regarding claim 8, Sand et. al. teach the method, further comprising a barb assembly connected to the eductor's chemical inlet port and the metering tip is connected to the barb assembly (See Fig. 1 of prior art where metering tip is to be inserted, denoted by dotted lines, into the orifice in the barb assembly attached and projecting laterally from the side of eductors 18 and 20). It is also common knowledge to one of ordinary skill in the art to use metering tips in conjunction with barb assemblies, which are attached to the inlet ports of the eductors, to control the dilution ratio of the chemical fluid(s) entering the eductor.

Regarding claim 36, Sand et. al. teach the method, wherein the concentrated sterilant is one of a concentrated disinfectant, a concentrated antiseptic, a concentrated sporicide, a concentrated biocide, a concentrated virucide, or a concentrated fungicide (See col. 4, lines 15-22 – one suitable application identifies dispensing chemical fluids such as disinfectants. The disinfectant could be characterized as concentrated because it is being diluted with water and potentially another chemical fluid, e.g. a pH-adjusting agent).

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sand et. al.

Regarding claim 31, Sand et. al. teach the method as described above in paragraph 1. Sand et. al. further teach the step of adjusting the metering tip to one having a second orifice (See col. 5, lines 1-7 – typically a metering tip (not shown) is inserted into the chemical port 94 for controlling the dilution ratio of the chemical fluid in coordination with the dimensional sizing of the eductor). Sand et. al. further teach the step of adjusting the working pressure [of the pressurized water supply] up or down into the inlet of the eductor (See col. 2, line 6 – the motive fluid is a pressurized water supply at water inlet 16; See col. 4, lines 23-27 – the motive fluid is received at an inlet valve 34, depicted as a ball valve, and passed through a motive fluid conduit 36 to the device 32 for mixing a selected chemical fluid, drawn respectively from chemical fluid reservoirs 38, 40 via chemical conduits 42, 44. The inlet valve 34, i.e. the ball valve, rotates as inlet valve 34 is rotated between an "open" and "closed" position, functioning to regulate the working pressure of the water supply entering the water inlet port of the eductor). However,

Sand et. al. fail to teach the step of adjusting the working pressure up or down while leaving the metering tip with the first orifice size alone to vary the admixture of sterilant and water. It would have been obvious to one of ordinary skill in the art at the time the invention was made to adjust the working pressure of the water, i.e. adjust the amount of water mixed with the concentrated sterilant, while leaving the metering tip with the first orifice alone, i.e. limiting the amount of sterilant into the eductor, because adjusting the water through the eductor while limiting the amount of sterilant entering the eductor allows the user to produce a more dilute sterilant admixture, which may be required for applications sensitive to a concentrated sterilant.

Regarding claim 32, Sand et. al. teach the method as described above in paragraph 1. Sand et. al. further teach the step of adjusting the metering tip to one having a second orifice (See col. 5, lines 1-7 – typically a metering tip (not shown) is inserted into the chemical port 94 for controlling the dilution ratio of the chemical fluid in coordination with the dimensional sizing of the eductor). Sand et. al. further teach the step of adjusting the working pressure [of the pressurized water supply] up or down into the inlet of the eductor (See col. 2, line 6 – the motive fluid is a pressurized water supply at water inlet 16; See col. 4, lines 23-27 – the motive fluid is received at an inlet valve 34, depicted as a ball valve, and passed through a motive fluid conduit 36 to the device 32 for mixing a selected chemical fluid, drawn respectively from chemical fluid reservoirs 38, 40 via chemical conduits 42, 44. The inlet valve 34, i.e. the ball valve, rotates as inlet valve 34 is rotated between an "open" and "closed" position, functioning to regulate the working pressure of the water supply entering the water inlet port of the eductor). However, Sand et. al. fail to teach the step of adjusting the metering tip to one having a second orifice, while leaving the working pressure alone to vary the admixture of sterilant and water. It would have been obvious to one of ordinary skill in the art at the time the invention was made to adjust the metering tip to one having a second orifice, i.e. allowing more concentrated sterilant into the

eductor, while leaving the working pressure [of the pressurized water supply] alone, i.e. limiting the amount of water into the eductor, because adjusting the amount of concentrated sterilant through the eductor while limiting the amount of water entering the eductor allows the user to maintain a more dilute sterilant admixture, which may be required for applications requiring a more concentrated sterilant.

3. Claims 2, 3, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sand et. al., as applied to claims 1 and 8, and further in view of Wachman et. al. [U.S. Patent No. 5,242,323].

Regarding claim 2, Sand et. al. teach the method as described above in paragraph 1, but fail to teach the concentrated sterilant is a 50% of less by weight solution of glutaraldehyde to water. Wachman et. al. teach a sterilant composition wherein the concentrated sterilant is a 50% or less by weight solution of glutaraldehyde to water (See col. 10, lines 51-57 – Example A). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the sterilant composition of Wachman et. al. into the method of Sand et. al. because Sand et. al. teach the dispensing of chemical fluids, such as disinfectants – the sterilant composition, as taught by Wachman et. al., that are diluted to a desired dilution ratio by mixing with a motive fluid of pressurized water.

Regarding claim 3, Sand et. al. teach the method as described above in paragraph 1, and further teach a second eductor 96 comprising a second chemical inlet [port] 98 and wherein a container containing a second chemical fluid is connected to the second chemical inlet port (See col. 5, lines 8-14). Sand et. al. fail to teach a pH-adjusting agent is connected to the second chemical inlet port. Wachman et. al. teach a sterilant composition that includes a concentrated sterilant, water, and a diluent, such as a pH-adjusting agent (See col. 4, lines 23-

33 – "typical embodiment of the present invention comprises: alkylbenzyldimethylammonium chloride, cetyldimethylethylammonium bromide, glutaraldehyde, Isopropyl alcohol, propylene glycol, sodium nitrite, tetrasodium ethylenediamine tetraacetate, and water). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the sterilant composition comprising a pH-adjusting agent, as taught by Wachman et. al., into the method of Sand et. al. because Sand et. al. provides the motivation for controlling the dilution ratio of multiple chemical solutions, where a first eductor produces a diluted admixture from one concentrated sterilant composition and a second eductor which produces a second diluted admixture from a second concentrated sterilant composition, such as the sterilant composition comprising a pH adjusting agent, as taught by Wachman et. al.

Regarding claim 9, Sand et. al. teach the method as described above in paragraph 1, but fail to teach the admixture produced comprises about a 3.2% by weight of glutaraldehyde, about a 0.925% by weight of the pH adjusting agent, and a balance by weight of water. Wachman et. al. teach an admixture, comprising about a 3.2% by weight of glutaraldehyde, about a 0.925% by weight of the pH adjusting agent, and a balance by weight of water (See col. 13, Example 5). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the sterilant composition comprising a pH-adjusting agent with the aforementioned constituent percentages, as taught by Wachman et. al., into the method of Sand et. al. because Sand et. al. provides the motivation for controlling the dilution ratio of multiple chemical solutions, where a first eductor produces a diluted admixture from one concentrated sterilant composition and a second eductor which produces a second diluted admixture from a second concentrated sterilant composition, such as the sterilant composition comprising a pH adjusting agent with the aforementioned constituent percentages, as taught by Wachman et. al.

4. Claims 19, 21, and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sand et. al. in view of Wachman et. al.

Regarding claim 19, Sand et. al. teach an apparatus for diluting a concentrate comprising: a proportioning and dispensing unit comprising at least two eductors (dispenser 30 with first eductor 92 and second eductor 96), wherein a first eductor comprises a first chemical inlet port ([first] chemical inlet port 94), a second chemical inlet port ([second] chemical inlet port 98), a motive source inlet port (See Fig. 2 – motive fluid conduit 36 from a pressurized water supply connected to eductor's water inlet port), and an outlet port (outlet 48); a first container containing a concentrate having a container outlet port and a first hose connecting the container outlet port to the first chemical inlet port (See col. 5, lines 1-7 – reservoir containing the chemical fluid (not shown) connected to the chemical inlet port of the eductor by use of a chemical fluid conduit); a line connecting a motive source to the motive source inlet port (motive fluid conduit 36), the line comprising a regulating valve for regulating pressure supplied by the motive source (See col. 2, line 6 – the motive fluid is a pressurized water supply at water inlet 16; See col. 4, lines 23-27 – the motive fluid is received at an inlet valve 34, depicted as a ball valve, and passed through a motive fluid conduit 36 to the device 32 for mixing a selected chemical fluid, drawn respectively from chemical fluid reservoirs 38, 40 via chemical conduits 42, 44. The inlet valve 34, i.e. the ball valve, rotates as inlet valve 34 is rotated between an "open" and "closed" position, functioning to regulate the working pressure of the water supply entering the water inlet port of the eductor); a third hose (hose 50) for connecting to the outlet port (outlet 48) of the eductor (device 32); a push button for opening a valve on the first eductor so as to permit motive source to flow through the first eductor (See col. 6, lines 46-54 – a dispenser 32 mixes a selected chemical fluid when an operator positions a selection member,

such as a selector disk 68, concentric disk selection member 122, push button selection member 152, and a cylindrical section member 202. Thereby, the device 32 diverts motive fluid to one or more fluids channels, such as to the first eductor 92 that draws a first chemical fluid for mixing, to the second eductor 96 that draws a second chemical fluid for mixing, or to the motive fluid bypass 100); and wherein a fist metering tip is removably received in the first chemical inlet port and a second metering tip is removably received in the second chemical inlet port (See col. 5, lines 1-13 – metering tips (not shown) inserted [removably received] into the [first] chemical port 94 of first eductor 92 and the [second] chemical port 98 of second eductor 96, respectively). Sand et. al. fail to teach a second container containing a pH adjusting agent having a container outlet port and a second hose connecting the container outlet port to the second chemical inlet port. Sand et. al. identify the use of a second container comprising an outlet port and a second chemical fluid conduit connecting the container to the second chemical inlet port 98 (See Specification, col. 5, lines 8-13); however, Sand et. al. do not specifically identify that the second chemical element is a pH-adjusting agent. Wachman et. al. teach a sterilant composition that includes a concentrated sterilant, water, and a diluent, such as a pH-adjusting agent (See col. 4, lines 23-33 – "typical embodiment of the present invention comprises: alkylbenzyldimethylammonium chloride, cetyldimethylethylammonium bromide, glutaraldehyde, Isopropyl alcohol, propylene glycol, sodium nitrite, tetrasodium ethylenediamine tetraacetate, and water). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the sterilant composition comprising a pH-adjusting agent, as taught by Wachman et. al., into the method of Sand et. al. because Sand et. al. provides the motivation for controlling the dilution ratio of multiple chemical solutions, where a first eductor produces a diluted admixture from one concentrated sterilant composition and a second eductor which produces a second diluted admixture from a second concentrated sterilant composition,

such as the sterilant composition comprising a pH adjusting agent, as taught by Wachman et. al.

Regarding claim 21, Sand et. al. and Wachman et. al. teach the apparatus as described above. Wachman et. al. further teach a sterilant composition wherein the concentrated sterilant is a 50% or less by weight solution of glutaraldehyde to water (See col. 10, lines 51-57 – Example A). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the sterilant composition of Wachman et. al. into the method of Sand et. al. because Sand et. al. teach the dispensing of chemical fluids, such as disinfectants – the sterilant composition, as taught by Wachman et. al., that are diluted to a desired dilution ratio by mixing with a motive fluid of pressurized water.

Regarding claim 23, Sand et. al. teach the apparatus, further comprising a barb assembly connected to the eductor's chemical inlet port and the metering tip is connected to the barb assembly (See Fig. 1 of prior art where metering tip is to be inserted, denoted by dotted lines, into the orifice in the barb assembly attached and projecting laterally from the side of eductors 18 and 20). It is also common knowledge to one of ordinary skill in the art to use metering tips in conjunction with barb assemblies, which are attached to the inlet ports of the eductors, to control the dilution ratio of the chemical fluid(s) entering the eductor).

Regarding claim 24, Sand et. al. teach the apparatus, wherein the third hose is directed to a holding container for outputting the admixture into the holding container (hose 50; See col. 6, lines 54-56 – the selected fluids are then dispensed through an outlet 48 for uses, such as for filling portable dispensing articles, such as spray bottles).

Regarding claim 25, Sand et. al. teach the apparatus, further comprising a container containing at least one of a disinfectant (See col. 4, lines 15-22 – one suitable application identifies dispensing chemical fluids such as disinfectants), a sporicide, a biocide, a virucide, or

a fungicide to a chemical inlet port (chemical port 98) of the second eductor (second eductor 96).

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sand et. al., as applied to claim 1, and further in view of Marais et. al. [U.S. Patent Publication No. 2004/0037737].

Regarding claim 5, Sand et. al. teach the method as described above in paragraph 1, but fail to teach the step of mounting the eductor in a health care facility. Marais et. al. teach a method of and equipment for washing, disinfecting, and/or sterilizing health care devices, including medical, dental, or veterinary equipment, as well as cooking and catering materials (See page 1, [0001]) with an aqueous solution that is electrochemically activated. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sand et. al. and Marais et. al. and to mount an eductor in a health care facility in order to produce an adequate sterilant and water admixture for use in sterilizing, washing, and/or disinfecting health care devices, including medical, dental, or veterinary equipment in a health care facility by the process and method, as taught by Marais et. al.

6. Claims 10, 12, 13, 16, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sand et. al. in view of Marais et. al.

Regarding claim 10, Sand et. al. teach a method for diluting a concentrated chemical solution with water, comprising the steps of: providing an eductor housed in a housing (single device [eductor] 32 or eductor 92 in dispenser 30); adjusting the eductor's output by adjusting a regulating valve to adjust a water supply pressure to a first pressure (See col. 2, line 6 – the motive fluid is a pressurized water supply at water inlet 16; See col. 4, lines 23-27 – the motive

fluid is received at an inlet valve 34, depicted as a ball valve, and passed through a motive fluid conduit 36 to the device 32 for mixing a selected chemical fluid, drawn respectively from chemical fluid reservoirs 38, 40 via chemical conduits 42, 44. The inlet valve 34, i.e. the ball valve, rotates as inlet valve 34 is rotated between an "open" and "closed" position, functioning to regulate the working pressure of the water supply entering the water inlet port of the eductor) and adjusting a chemical inlet back pressure by selecting a metering tip having a first orifice size (See col. 5, lines 1-7 – metering tip (not shown) with an orifice inserted into the chemical port 94 for controlling the dilution ratio of the chemical fluid); hooking an inlet connected to a container containing the concentrated chemical solution to the eductor's chemical inlet port (See col. 5, lines 4-7 – reservoir containing the chemical fluid (not shown) connected to the chemical inlet port of the eductor by use of a chemical fluid conduit); hooking an inlet line from a water supply source downstream of the regulating valve to the eductor's water inlet port (See Fig. 2 – motive fluid conduit 36 from a pressurized water supply connected to eductor's water inlet port); activating the eductor so that water flows through the water inlet port and concentrated chemical solution flows through the chemical inlet port (single selection control 52 for activating the mixing and for simplifying use of the dispenser); outputting the admixture into a holding container (See col. 6, lines 54-56 – the selected fluids are then dispensed through an outlet 48 for uses, such as for filling portable dispensing articles, such as spray bottles); and applying the mixture to a surface (See col. 6, lines 54-56 – the selected fluids are then dispensed through an outlet 48 for uses, such as washing portable dispensing articles). Sand et. al. fail to particularly teach that the application of the admixture to a surface is inside a health care facility. Marais et. al. teach a method of and equipment for washing, disinfecting, and/or sterilizing health care devices, including medical, dental, or veterinary equipment, as well as cooking and catering materials (See page 1, [0001]) with an aqueous solution that is electrochemically activated. It

would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sand et. al. and Marais et. al. because Sand et. al. teaches the application of the admixture for uses, such as washing portable dispensing articles, e.g. spray bottles, where the method of Sand et. al. could be used to apply the admixture to the surfaces of a spray bottle or other medical equipment found in a health care facility, as taught by Marais et. al.

Regarding claim 12, Sand et. al. further teach the eductor is equipped with a second metering tip comprising a second orifice size (See col. 5, lines 1-14).

Regarding claim 13, Sand et. al. teach the eductor comprises a second chemical inlet [port] 98 and wherein a container containing a second chemical fluid is connected to the second chemical inlet port (See col. 5, lines 8-14).

Regarding claim 16, Sand et. al. teach the step of providing a second eductor (second eductor 96) and hooking a container containing at least one of a disinfectant (See col. 4, lines 15-22 – one suitable application identifies dispensing chemical fluids such as disinfectants), a sporicide, a biocide, a virucide, or a fungicide to a chemical inlet port (chemical port 98) of the second eductor (second eductor 96).

Regarding claim 17, Sand et. al. teach the method, further comprising a barb assembly connected to the eductor's chemical inlet port and the metering tip is connected to the barb assembly (See Fig. 1 of prior art where metering tip is to be inserted, denoted by dotted lines, into the orifice in the barb assembly attached and projecting laterally from the side of eductors 18 and 20). It is also common knowledge to one of ordinary skill in the art to use metering tips in conjunction with barb assemblies, which are attached to the inlet ports of the eductors, to control the dilution ratio of the chemical fluid(s) entering the eductor.

7. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sand et. al. in view of Grune et. al. [U.S. Patent No. 6,293,153].

Sand et. al. teach the method as described above in paragraph 1, but fail to teach the step of providing a pressure gauge downstream of the regulating valve. Grune et. al. teach a pressure gauge positioned downstream of a regulating valve (pressure regulator 10) for measuring the pressure of the fluidizing gas being admitted into the system (See col. 2, lines 40-45). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate a step for providing a pressure gauge, as taught by Grune et. al., into the method of Sand et. al. because a pressure gauge would function to measure the working pressure of the pressurized water supply entering the eductor inlet.

8. Claims 11 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sand et. al. in view of Marais et. al., as applied above in paragraph 4, and further in view of Wachman et. al.

Regarding claim 11, Sand et. al. and Marais et. al. teach the method as described above in paragraph 4, but fail to teach the concentrated sterilant is a 50% of less by weight solution of glutaraldehyde to water. Wachman et. al. teach a sterilant composition wherein the concentrated sterilant is a 50% or less by weight solution of glutaraldehyde to water (See col. 10, lines 51-57 – Example A). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the sterilant composition of Wachman et. al. into the methods of Sand et. al. and Marais et. al. because Sand et. al. teach the dispensing of chemical fluids, such as disinfectants – the sterilant composition, as taught by Wachman et. al., that are diluted to a desired dilution ratio by mixing with a motive fluid of pressurized water.

Regarding claim 18, Sand et. al. and Marais et. al. teach the method as described above in paragraph 4, but fail to teach the admixture produced comprises about a 3.2% by weight of glutaraldehyde, about a 0.925% by weight of the pH adjusting agent, and a balance by weight of water. Wachman et. al. teach an admixture, comprising about a 3.2% by weight of glutaraldehyde, about a 0.925% by weight of the pH adjusting agent, and a balance by weight of water (See col. 13, Example 5). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the sterilant composition comprising a pH-adjusting agent with the aforementioned constituent percentages, as taught by Wachman et. al., into the methods of Sand et. al. and Marais et. al. because Sand et. al. provides the motivation for controlling the dilution ratio of multiple chemical solutions, where a first eductor produces a diluted admixture from one concentrated sterilant composition and a second eductor which produces a second diluted admixture from a second concentrated sterilant composition, such as the sterilant composition comprising a pH adjusting agent with the aforementioned constituent percentages, as taught by Wachman et. al.

9. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sand et. al. in view of Marais et. al., as applied above in paragraph 4, and further in view of Grune et. al.

Sand et. al. and Marais et. al. teach the method as described above in paragraph 4, but fail to teach the step of providing a pressure gauge downstream of the regulating valve. Grune et. al. teach a pressure gauge positioned downstream of a regulating valve (pressure regulator 10) for measuring the pressure of the fluidizing gas being admitted into the system (See col. 2, lines 40-45). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate a step for providing a pressure gauge, as taught by Grune et.

al., into the methods of Sand et. al. and Marais et. al. because a pressure gauge would function to measure the working pressure of the pressurized water supply entering the eductor inlet.

10. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sand et. al. in view of Wachman et. al., as applied above in paragraph 3, and further in view of Bristor [U.S. Patent Publication No. 2003/0150936].

Sand et. al. and Wachman et. al. teach the method as described above in paragraph 3, but fail to teach the first metering tip and the second metering tip each comprise an orifice. Bristor teaches that since the size of the orifice 108 of the metering tip 106 controls the amount of chemical drawn and thus controls the dilution ratio, the user need only select the proper metering tip 106 to match the desired dilution ration and thread it into the treaded insert 102 (See page 6, [0086]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the metering tips comprising an orifice, as taught by Bristor into the apparatus of Sand et. al. and Wachman et. al. because choosing an appropriate metering tip comprising an orifice provides allows a user to control the desired dilution ratio.

11. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sand et. al. in view of Marais et. al. and Bristor.

Regarding claim 27, Sand et. al. teach a method for dispensing an admixture of concentrated chemical solution and water in a proportioning and dispensing unit comprising: mounting two eductors to a housing and mounting (first eductor 92 and second eductor 96 mounted in dispenser 30), the two eductors having a common water inlet header (motive fluid passage 120); connecting a first chemical to a chemical inlet port of the first eductor (See col. 5, lines 1-7); connecting a second chemical to a chemical inlet port of the second eductor (See col.

5, lines 8-14); connecting a water supply line to the common water inlet header (See col. 4, line 23); the water supply line comprising a regulating valve (See col. 2, line 6 – the motive fluid is a pressurized water supply at water inlet 16; See col. 4, lines 23-27 – the motive fluid is received at an inlet valve 34, depicted as a ball valve, and passed through a motive fluid conduit 36 to the device 32 for mixing a selected chemical fluid, drawn respectively from chemical fluid reservoirs 38, 40 via chemical conduits 42, 44. The inlet valve 34, i.e. the ball valve, rotates as inlet valve 34 is rotated between an "open" and "closed" position, functioning to regulate the working pressure of the water supply entering the water inlet port of the eductor); activating at least one of the first eductor or the second eductor to produce an admixture of at least one of the first chemical and water or the second chemical and water (single selection control 52 – See col. 4, lines 38-45); and wherein the chemical inlets of the first and second eductors each comprises a metering tip having an orifice (metering tips (not shown) – See col. 4, lines 1-14). Sand et. al. fail to teach that the metering tips corresponding to the first and second eductor have orifices. Further Sand et. al. fail to teach . Bristor teaches that since the size of the orifice 108 of the metering tip 106 controls the amount of chemical drawn and thus controls the dilution ratio, the user need only select the proper metering tip 106 to match the desired dilution ration and thread it into the treaded insert 102 (See page 6, [0086]). Sand et. al. fail to particularly teach that the application of the admixture to a surface is inside a health care facility. Marais et. al. teach a method of and equipment for washing, disinfecting, and/or sterilizing health care devices, including medical, dental, or veterinary equipment, as well as cooking and catering materials (See page 1, [0001]) with an aqueous solution that is electrochemically activated. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sand et. al., Marais et. al., and Wachman et. al. because Sand et. al. teaches the application of the admixture for uses, such as washing portable dispensing articles, e.g.

spray bottles, where the method of Sand et. al. could bé used with an eductor mounted to a health care facility to produce and apply an adequate sterilant and water apply the admixture for use in sterilizing, washing, and/or disinfecting health care devices, including medical, dental, or veterinary equipment in a health care facility by the process and method, as taught by Marais et. al. Further, the teachings of Bristor enhance the method of Sand et. al. in providing metering tips comprising an orifice, allowing a user to control the desired dilution ratio of the chemical solution/water admixture.

12. Claims 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sand et. al. in view of Marais et. al. and Bristor, as applied above in paragraph 9, and further in view of Wachman et. al.

Regarding claim 28, Sand et. al., Marais et. al. and Bristor teach the method as described above in paragraph 9, but fail to teach the concentrated sterilant is a 50% of less by weight solution of glutaraldehyde to water. Wachman et. al. teach a sterilant composition wherein the concentrated sterilant is a 50% or less by weight solution of glutaraldehyde to water (See col. 10, lines 51-57 – Example A). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the sterilant composition of Wachman et. al. into the method of Sand et. al., Marais et. al. and Bristor because Sand et. al. teach the dispensing of chemical fluids, such as disinfectants – the sterilant composition, as taught by Wachman et. al., that are diluted to a desired dilution ratio by mixing with a motive fluid of pressurized water.

Regarding claim 29, Sand et. al., Marais et. al. and Bristor teach the method as described above in paragraph 9, but fail to teach the method, wherein the second chemical is a pH-adjusting agent. Wachman et. al. teach a sterilant composition that includes a concentrated

sterilant, water, and a diluent, such as a pH-adjusting agent (See col. 4, lines 23-33 – "typical embodiment of the present invention comprises: alkylbenzyldimethylammonium chloride, cetyldimethylethylammonium bromide, glutaraldehyde, Isopropyl alcohol, propylene glycol, sodium nitrite, tetrasodium ethylenediamine tetraacetate, and water). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the sterilant composition comprising a pH-adjusting agent, as taught by Wachman et. al., into the method of Sand et. al. because Sand et. al. provides the motivation for controlling the dilution ratio of multiple chemical solutions, where a first eductor produces a diluted admixture from one concentrated sterilant composition and a second eductor which produces a second diluted admixture from a second concentrated sterilant composition, such as the sterilant composition comprising a pH adjusting agent, as taught by Wachman et. al.

Regarding claim 30, Sand et. al., Marais et. al. and Bristor teach the method as described above in paragraph 9, but fail to teach the method, wherein the first chemical is a 50% by weight of glutaraldehyde to water and the second chemical is a diluent. Wachman et. al. teach a sterilant composition wherein the concentrated sterilant is a 50% or less by weight solution of glutaraldehyde to water (See col. 10, lines 51-57 – Example A). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the sterilant composition of Wachman et. al. into the method of Sand et. al., Marais et. al. and Bristor because Sand et. al. teach the dispensing of chemical fluids, such as disinfectants – the sterilant composition, as taught by Wachman et. al., that are diluted to a desired dilution ratio by mixing with a motive fluid of pressurized water. Wachman et. al. further teach a sterilant composition that includes a concentrated sterilant, water, and a diluent, such as a pH-adjusting agent (See col. 4, lines 23-33 – "typical embodiment of the present invention comprises: alkylbenzyldimethylammonium chloride, cetyldimethylethylammonium bromide, glutaraldehyde,

Isopropyl alcohol, propylene glycol, sodium nitrite, tetrasodium ethylenediamine tetraacetate, and water). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate a first sterilant composition wherein the concentrated sterilant is a 50% or less by weight solution of glutaraldehyde to water and a diluent, both as taught by Wachman et. al., into the process of Sand et. al. because Sand et. al. provides the motivation for controlling the dilution ratio of multiple chemical solutions, where a first eductor produces a diluted admixture from one concentrated sterilant composition and a second eductor which produces a second diluted admixture from a second concentrated sterilant composition.

13. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sand et. al., as applied above in paragraph 1, and further in view of Taylor [U.S. Patent Publication No. 2002/0061263].

Sand et. al. teach the method as described above in paragraph 1, but fail to teach the method, wherein the regulating valve regulates the water supply source to a water pressure of less than 50 psi. Taylor teaches a method for chlorine dioxide generation, comprising regulating the water supply source to a water pressure of 30 psi (See page 4, [0041]). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to regulate the water supply source to a water pressure of less than 50 psi because Applicant has not disclosed that a water pressure of less than 50 psi provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well at other water pressures. Therefore, in view of Taylor, it would have been obvious to one of ordinary skill in the art to modify Sand et. al. to teach the method of regulating the water supply source to a water pressure less than 50 psi, as specified in claim 4.

14. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sand et. al. in view of Marais et. al., as applied above in paragraph 4, and further in view of Taylor.

Sand et. al. and Marais et. al. teach the apparatus as described above in paragraph 4, but fail to teach the method, wherein the regulating valve regulates the water supply source to a water pressure of less than 50 psi. Taylor teaches an apparatus for chlorine dioxide generation, comprising regulating the water supply source to a water pressure of 30 psi (See page 4, [0041]). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to regulate the water supply source to a water pressure of less than 50 psi because Applicant has not disclosed that a water pressure of less than 50 psi provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well at other water pressures. Therefore, in view of Taylor, it would have been obvious to one of ordinary skill in the art to modify Sand et. al. and Marais et. al. to teach the apparatus of regulating the water supply source to a water pressure less than 50 psi, as specified in claim 14.

15. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sand et. al. in view of Wachman et. al., as applied above in paragraph 3, and further in view of Taylor.

Sand et. al., and Wachman et. al. teach the method as described above in paragraph 3, but fail to teach the method, wherein the regulating valve regulates the water supply source to a water pressure of less than 50 psi. Taylor teaches an apparatus for chlorine dioxide generation, comprising regulating the water supply source to a water pressure of 30 psi (See page 4, [0041]). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to regulate the water supply source to a water pressure of less than 50 psi

because Applicant has not disclosed that a water pressure of less than 50 psi provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well at other water pressures. Therefore, in view of Taylor, it would have been obvious to one of ordinary skill in the art to modify Sand et. al. and Marais et. al. to teach the apparatus of regulating the water supply source to a water pressure less than 50 psi, as specified in claim 20.

16. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sand et. al., as applied above in paragraph 1, and further in view of Stanley [U.S. Patent Publication No. 2004/0156744].

Sand et. al. teach the method as described above in paragraph 1, but fail to teach the step of hooking the water supply source to an inlet of a booster pump and hooking a pump outlet to the water inlet port of the eductor. Stanley teaches a cleaning and sterilizing device and method that utilizes a positive pressure pump to produce positive pressure flow, which provides a greater range of pressures. Stanley further teaches that positive pressure low provides both the pressure source and the fluid source at one location, simplifying connections and automation. Positive pressure is also safer because contaminants cannot be drawn into the device through leaks in the system (See Specification, p. 4, [0056]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Stanley into Sand et. al. for providing a pump connected between the motive source and the regulating valve because as Stanley teaches the positive pressure flow would provide the user with a greater range of working pressures for the motive fluid (See page 4, [0056]). Sand et. al. provide the motivation for the control and regulating of the motive fluid pressure into the eductor, providing more control over the amount of motive fluid added in diluting the concentrated

chemical fluid. The booster pump creates such a control means for regulating the pressure of the motive fluid into the eductor and allowing the user to control the dilution ratio of the diluted concentrated solution of sterilant.

17. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sand et. al. in view of Marais et. al., as applied above in paragraph 4, and further in view of Stanley.

Sand et. al. and Wachman et. al. teach the apparatus as described above in paragraph 4, but fail to teach the step of hooking the water supply source to an inlet of a booster pump and hooking a pump outlet to the regulating valve. Stanley teaches a cleaning and sterilizing device and method that utilizes a positive pressure pump to produce positive pressure flow, which provides a greater range of pressures. Stanley further teaches that positive pressure low provides both the pressure source and the fluid source at one location, simplifying connections and automation. Positive pressure is also safer because contaminants cannot be drawn into the device through leaks in the system (See Specification, p. 4, [0056]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Stanley into Sand et. al. and Marais et. al. for providing a pump connected between the motive source and the regulating valve because as Stanley teaches the positive pressure flow would provide the user with a greater range of working pressures for the motive fluid (See page 4, [0056]). Sand et. al. provide the motivation for the control and regulating of the motive fluid pressure into the eductor, providing more control over the amount of motive fluid added in diluting the concentrated chemical fluid. The booster pump creates such a control means for regulating the pressure of the motive fluid into the eductor and allowing the user to control the dilution ratio of the diluted concentrated solution of sterilant.

18. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sand et. al. and Wachman et. al., as applied above in paragraph 3, and further in view of Stanley.

Sand et. al., and Wachman et. al. teach the method as described above in paragraph 3, but fail to teach the step of hooking the water supply source to an inlet of a booster pump and hooking a pump outlet to the regulating valve. Stanley teaches a cleaning and sterilizing device and method that utilizes a positive pressure pump to produce positive pressure flow, which provides a greater range of pressures. Stanley further teaches that positive pressure low provides both the pressure source and the fluid source at one location, simplifying connections and automation. Positive pressure is also safer because contaminants cannot be drawn into the device through leaks in the system (See Specification, p. 4, [0056]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Stanley into Sand et. al., and Wachman et. al. for providing a pump connected between the motive source and the regulating valve because as Stanley teaches the positive pressure flow would provide the user with a greater range of working pressures for the motive fluid (See page 4, [0056]). Sand et. al. provide the motivation for the control and regulating of the motive fluid pressure into the eductor, providing more control over the amount of motive fluid added in diluting the concentrated chemical fluid. The booster pump creates such a control means for regulating the pressure of the motive fluid into the eductor and allowing the user to control the dilution ratio of the diluted concentrated solution of sterilant.

19. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sand et. al. in view of Marais et. al., as applied above in paragraph 4, and further in view of Buongiorne et. al. [U.S. Patent Publication No. 2002/0061474].

Sand et. al. and Marais et. al. teach the method as described above in paragraph 4, but fail to teach the concentrated chemical solution is a concentrated photochemical. Buongiorne et. al. teach the use of a concentrated aqueous color developing composition for providing a color image comprising color developing an imagewise exposed color silver halide photographic element. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Buongiorne et. al. with the methods of Sand et. al. and Marais et. al. because Sand teaches the use of concentrated chemical fluids, such as the concentrated aqueous color developing composition of Buongiorne et. al.

20. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sand et. al. in view of Wachman et. al., as applied above in paragraph 3, and further in view of Buongiorne et. al.

Sand et. al. and Wachman et. al. teach the apparatus as described above in paragraph 3, but fail to teach the concentrated chemical solution is a concentrated photochemical. Buongiorne et. al. teach the use of a concentrated aqueous color developing composition for providing a color image comprising color developing an imagewise exposed color silver halide photographic element. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Buongiorne et. al. with the apparatus of Sand et. al. and Wachman et. al. because Sand teaches the use of concentrated chemical fluids, such as the concentrated aqueous color developing composition of Buongiorne et. al.

21. Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sand et. al. in view of Marais et. al., and Bristor, as applied above in paragraph 9, and further in view of Buongiorne et. al.

Sand et. al., Marais et. al., and Bristor teach the method as described above in paragraph 9, but fail to teach the concentrated chemical solution is a concentrated photochemical. Buongiorne et. al. teach the use of a concentrated aqueous color developing composition for providing a color image comprising color developing an imagewise exposed color silver halide photographic element. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Buongiorne et. al. with the methods of Sand et. al., Marais et. al., and Bristor because Sand teaches the use of concentrated chemical fluids, such as the concentrated aqueous color developing composition of Buongiorne et. al.

Response to Arguments

22. Applicants' arguments filed 11 April 2005, with respect to the rejection(s) of the following claims have been fully considered but they are not persuasive:

With regard to claim(s) 1, 7-8, and 36, Applicants argue that inlet valve 34, a ball valve, "does not regulate the working pressure of the supplied water". Applicants further argue that the eductor systems disclosed by the Sand et. al. patent cannot produce an accurate blending ratio of admixture at the outlet as compared to the method employed by Applicants' claim 1. Applicants cite Sand et. al., which states, "in some applications, the selection control includes a position wherein no mixed fluids are emitted form the outlet 48, and thus the inlet valve 34 may be omitted or not routinely used". Applicants conclude, "if a regulating valve is important in regulating an admixture, then it cannot be eliminated" (See Applicants' Remarks/Arguments, pages 16 and 17). Examiner finds Applicants' arguments unpersuasive. Although Sand et. al. may not produce the same accurate blending ratio of admixture at the outlet as compared to the method employed by Applicants as cited through claim 1, Sand et. al. does disclose each process limitation claimed by Applicants in claim 1. Sand et. al. teach that concentrated

solutions of sterilant are diluted to a desired ratio by mixing the sterilant with a motive fluid of pressurized water (See col. 4, lines 15-20). Sand et. al. further teach that the [pressurized] motive fluid is received at an inlet valve 34, depicted as a ball valve, and passed through a motive fluid conduit 36 to the device 32 for mixing a selected chemical fluid, drawn respectively from chemical fluid reservoirs 38, 40 via chemical conduits 42, 44 (See col. 4, lines 24-28). The inlet valve 34, i.e. the ball valve rotates between an opened and closed position as inlet valve 34 is rotated between an "open" and "closed" position, regulates the working pressure of the [pressurized] water supply source that is allowed to enter and flow through the water inlet port of the eductor. Examiner disagrees with Applicants' interpretation of Sand et. al. in column 4, lines 39-46 implying that the regulating valve is unimportant. Although Sand et. al. teaches an embodiment used "in some applications", where "no mixed fluids are emitted from the outlet 48", i.e. dispensing of a concentrated sterilant without mixing, Sand et. al. "in some applications" would include the use of inlet valve 34 for regulating the working pressure of the [pressurized] water supply that is allowed to enter and flow through the water inlet port of the eductor in conjunction with the other process limitations, as claimed in Applicants' claim 1. Accordingly, Examiner maintains the rejection(s) for independent claim 1 and dependent claims 7-8 and 36, as described above in paragraph 1.

With regard to claim(s) 2-3 and 9, Applicants argue that Sand et. al. and Wachman et. al. fail to disclose "the step of using a regulating valve for regulating the working pressure of the motive to fluid to thereby produce a more accurate admixture than an eductor without such regulating valve" (See Applicants' Remarks/Arguments, pages 20 and 21). Thus, Applicants argue that dependent claims 2-3, 5-6, and 9 are allowable. In view of Examiner's response to Applicants' Remarks/Arguments for the rejection(s) of claim 1 as identified above, Examiner maintains the rejection(s) under 103(a) for dependent claims 2-3 and 9.

With regard to claim(s) 11-13, 15-18, and 37, Applicants argue that Sand et. al. and Wachman et. al. fail to disclose "the step of using a regulating valve for regulating the working pressure of the motive to fluid to thereby produce a more accurate admixture than an eductor without such regulating valve" (See Applicants' Remarks/Arguments, pages 21 and 22). Thus, Applicants argue that dependent claims 11-13, 15-18, and 37 are allowable. In view of Examiner's response to Applicants' Remarks/Arguments for the rejection(s) of claim 1, as identified above, which is applicable for claim 10, Examiner maintains the rejection(s) under 103(a) for dependent claims 11-13, 15-18, and 37.

With regard to claim(s) 21-25 and 38, Applicants argue that Sand et. al. and Wachman et. al. fail to disclose "the step of using a regulating valve for regulating pressure supplied by the motive source" " (See Applicants' Remarks/Arguments, pages 22 and 23). Thus, Applicants argue that dependent claims 21-25 and 38 are allowable. In view of Examiner's response to Applicants' Remarks/Arguments for the rejection(s) of claim 1, as identified above, which is applicable for claim 19, Examiner maintains the rejection(s) under 103(a) for dependent claims 21-25 and 38.

With regard to claim(s) 28-30 and 39, Applicants argue that Sand et. al. and Wachman et. al. fail to disclose a regulating valve and the use of an eductor mounted in a health care facility for onsite blending. In view of Examiner's response to Applicants' Remarks/Arguments for the rejection(s) of claim 1, as identified above, which is applicable for claim 19, and the new rejection(s) identified above, Examiner maintains the rejection(s) under 103(a) for dependent claims 28-30 and 39.

With regard to claim(s) 33-35, Applicants argue that Sand et. al., Wachman et. al., and Stanley fail to disclose a regulating valve and the use of an eductor mounted in a health care facility for onsite blending. Applicants further argue that Stanley is wholly inappropriate, where

Stanley is concerned with a device that does not suggest or contemplate using a pump in conjunction with an eductor for producing an admixture for use on an equipment or device. In view of Examiner's response to Applicants' Remarks/Arguments for the rejection(s) of claim 1, as identified above, which is also applicable for claims 19 and 27, and the rejection(s) identified above, Examiner maintains the rejection(s) under 103(a) for dependent claims 33-35.

23. Applicants' arguments, see pages 18 and 19 of Applicants' Remarks/Arguments, filed 11 April 2005, with respect to the rejection(s) of claim 26 under 103(a), have been fully considered and are persuasive. The rejection(s) of claim(s) 26 has been withdrawn.

24. Applicants' arguments, see pages 18 and 19, of Applicants' Remarks/Arguments, filed 11 April 2005, with respect to the rejection(s) of claims 31 and 32 under 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Sand et. al., as described above in paragraph 2.

25. Applicants' arguments, see pages 20-22, of Applicants' Remarks/Arguments, filed 11 April 2005, with respect to the rejection(s) of claims 5 and 10 under 103(a) have been considered, but are moot in view of the new ground(s) of rejection, as described above in paragraphs 5 and 6, respectively (See also Examiner's response to Applicants' Remarks/Arguments for the rejection(s) of claim 1 as identified above in paragraph 20, similarly applicable with respect to claim 10).

26. Applicants' arguments, see pages 20 and 21, of Applicants' Remarks/Arguments, filed 11 April 2005, with respect to the rejection(s) of claim 6 under 103(a) have been considered, but are moot in view of the new ground(s) of rejection, as described above in paragraph 7.

27. Applicants' arguments, see pages 22 and 23, Applicants' Remarks/Arguments, filed 11 April 2005, with respect to the rejection(s) of claim 19 under 103(a) have been considered, but are moot in view of the new ground(s) of rejection, as described above in paragraph 4 (See also Examiner's response to Applicants' Remarks/Arguments for the rejection(s) of claim 1 as identified above in paragraph 20, similarly applicable with respect to claim 19).

28. Applicants' arguments, see pages 23 and 24, Applicants' Remarks/Arguments, filed 11 April 2005, with respect to the rejection(s) of claim 27 under 103(a) have been considered, but are moot in view of the new ground(s) of rejection, as described above in paragraph 11 (See also Examiner's response to Applicants' Remarks/Arguments for the rejection(s) of claim 1 as identified above in paragraph 20, similarly applicable with respect to claim 27).

29. Applicants' arguments, see pages 24 and 25, of Applicants' Remarks/Arguments, filed 11 April 2005, with respect to the rejection(s) of claims 4, 14, and 20 under 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Sand et. al., as described above in paragraphs 13, 14, and 15, respectively.

Allowable Subject Matter

30. Claim 26 is allowed.

The following is a statement of reasons for the indication of allowable subject matter: Claim 26 includes the limitations for a method, comprising the steps of selecting a hose with unit degradations along at least a portion of the hose length, filling the hose length with a quantity of fluid to a starting fluid level, activating the eductor to produce the admixture of fluid and water at the outlet port, de-activating the eductor, determining an amount of fluid dispensed from the eductor by measuring the unit gradations on the first hose between a starting fluid level and a second fluid level measured after the eductor is de-activated, determining a percent ratio of fluid dispensed to water used to dispense the fluid through the eductor, and if the percent ratio of fluid to water is not as desired, changing at least one of the first metering tip having the first orifice size to a second metering tip having a second orifice size and the first water pressure set point of the pressure regulator to a second water pressure set point, and repeating the steps as necessary until a percent ratio of fluid to water is as desired. None of the references identified above teach the aforementioned claimed limitations of claim 26 nor would it have been obvious to combine references to achieve the claimed inventive subject matter.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

31. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brad Y. Chin whose telephone number is 571-272-2071. The examiner can normally be reached on Monday – Friday, 8:00 A.M. – 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sun (John) Kim, can be reached at 571-272-1142. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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byc
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